URINE CALCIUM-CREATININE RATIO AND MICROALBUMINURIA IN PREDICTION OF PREECLAMPSIA

ABSTRACT

Introduction:

Hypertensive disorders of pregnancy have been a challenge to obstetricians worldwide. Preeclampsia and its complications are frequent causes for maternal and perinatal morbidity and mortality, particularly in developing countries.

Aim:

To determine whether low urinary calcium to creatinine ratio and microalbuminuria in asymptomatic pregnant women, can predict the later development of preeclampsia.

Objective:

To do urine calcium and creatinine estimation and microalbuminuria in spot urine sample between 20 to 24 weeks of gestation.

To follow these patients until delivery for development of pre eclampsia and

To see if there is any correlation.

Materials and method:

Specimen: Spot urine sample collected in calcium free vials.

Methods:

a) **Estimation of urinary calcium by Ortho-Cresolphthalein complexone method**
b) **Estimation of urinary creatinine by Jaffe's reaction**
c) **Estimtion of microalbuminuria by Turbidimetric Immunoassay**

Statistical method:

Chi square test / Fisher Exact test to find the association of preeclampsia with UCCR and microalbuminuria.

p value $\leq$0.01 strongly significant

0.01-0.05 moderately significant and

0.05-0.1 suggestively significant.

Inclusion Criteria:

i. Normotensive asymptomatic pregnant women between 20-24 weeks of gestation attending antenatal OPD.
ii. Urine albumin nil by dipstick method
iii. Women with previous and family history of preeclampsia/ GHT are included in the study.

Exclusion criteria:

i) Patients with history of chronic hypertension / use of any anti-hypertensive drugs.
ii) Patients with diabetes, renal diseases / or on diuretics.
iii) Proteinuria or BP >140/90mmHg at booking visit
iv) Other chronic medical illness.

Keywords:

Pre eclampsia, urine calcium creatinie ratio, microalbuminuria.